



# Full Stack Java

# Development

**3 Months & 8 Technologies**  
“Become a Full Stack Java developer”



Transform your future with our education



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## Why take this course?

- Designed for Graduates/Under Graduates or job seekers and professionals who want to enhance their technical knowledge
- Studying/Studied GRADUATION
- Any Graduate/engineer who is interested in Coding Freshers/Graduates
- Non-programming engineers

## In addition Course helps you

- Improve your logical thinking: Improve your problem-solving abilities
- Improve your searching skills: Understand how software applications work
- Find a nice and well-paid job; Improve your self-confidence
- 100% JOB ASSISTANCE after completion of course to make your Profile reach to Hundreds of Recruiters in our network and with the company we have tie up

## Features

- Real-Time Projects
- Hands On Experience
- Mock Tests and Mock Interviews
- Daily Assignments and Seminars



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## Web Technology

- Introduction to Web-technology
- What is web?
- What is network?
- What is internet?
- What is web-development?
- What is browser?
- What is web-server?
- What is http?
- What is the use of http?
- What is html?
- What is website?
- What is web-page?
- Structure of Web
- Definition of all the points
- Install of Editors
- How to write program using editors

## Table

- How to create table in Html
- Attributes of table
- Example

## HTML-5

- Introduction:
- Structure of html
- What is tags?
- Types of tags
- Attributes
- All tags attributes
- How to apply all the attributes in web-pages

## List

- How to create list
- . Attributes of list
- . Example

## Audio/Video

- Attributes of audio/video tag
- How to create audio page
- How to create video page

## I-frame

- What is nested web-page?
- How to create nested web-pages
- Attributes of nested web-pages



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## SVG

- How to define graphics in html
- Attributes of SVG

## Form

- What is form
- How to create forms using html
- How to create log-in page
- How to create registration page using form
- Attributes of form

## CSS-3

- Introduction:
- What is css?
- What is the use of css?
- Types of css
- How to call css inside html pages

## Background

- How to set background properties
- Attributes for background

## Pseudo-class & Pseudo-elements

- What is pseudo-class?
- What is pseudo-elements
- Types of pseudo-class
- Types of pseudo-elements
- How to apply

## Box-Mode

- What is box-model in css
- How to work with box-model

## Selectors

- What is selector?
- Types of selector
- How to apply selector



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## Combinators

- What is combinators?
- Types of combinators
- How it is related to selectors

## Transition, Transform & Animation in css

- Applications of Transition, Transform & Animation
- Use of Transition, Transform & Animation
- Basic Project based on Transition, Transform & Animation.

## Javascript

- Introduction:
- What is javascript?
- What is the difference between java & javascript
- Application of javascript
- Advantages & Disadvantages of javascript
- Types of javascript
- Datatypes in javascript
- Looping Statement
- Conditional Statement

## Function & Arrays

- What is function
- What is array
- Types of function
- Methods of array

## String & Object

- What is string
- Methods of string
- What is object
- How to create object in js



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## Date & Math

- What is date method
- What is math method
- Methods of date & math

## Advanced array methods in js

- Javascript Closure
- DOM elements in javascript
- Json in javascript
- Ajax in javascript
- Canvas using javascript

## Collection in js

- What is collection
- Types of collection

## Regular Expression in js

- What is regular expression
- How to create dynamic form in js

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## Section 1

- **Introduction to programming**
- Introduction to java
- JDK installation
- Keywords, Identifiers, variables
- Operators, Method/Functions
- Flow Control Statements
- Arrays, Strings
- Interactive programs in java using Scanner

## Section 3

- Java Built-in packages and API
- Overview of java API
- Object class
- String, String Buffer and String Builder
- Exception Handling
- Threads and multithreading
- Wrapper Classes
- Data Structures
- JAVA COLLECTION FRAMEWORKS\*\*\*
- File Handling, Serialization
- Encapsulation

## Section 2

- **Object Oriented Programming System**
- Classes and Objects
- Object creation
- Reference variable
- Global and local variables
- Constructors
- Aggregation
- Composition
- Inheritance \*\*\*
- Method Overloading
- Method Overriding
- Abstract classes
- Interfaces
- Typecasting
- JVM architecture
- Polymorphism
- Abstraction
- Java packages
- Access Specifies



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## Result Set

- How to handle the result set object
- How to process the result set object

## SERVLET

- Introduction
- What is web browser?
- What is web resources?
- Types of web resources
- What is web server?
- Installing of apache tomcat web server

## Web URL

- Web url structure.
- Query string.
- HTTP & HTTPS protocols.
- Key elements of HTTP request and HTTP response
- HTTP methods.
- Difference between GET and POST.

## Closing of JDBC objects

- Why to close an object?
- How to close an object

## About servlet

- Servlet introduction
- Creating the first servlet in web app
- Steps to create WAR file
- Build & Deployment process

## Servlet Container

- About servlet containers & its advantages
- Request and response objects
- GetParameter() and getParameters() methods
- About XML
- About deployment descriptor(web.xml)



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## Introduction to JAVA EE

- What is computer ?
- What is an application?
- Types of application?
- What is standalone application?
- What is web application?
- What is network?
- What is internet?
- What is intranet?
- What is server?
- What is database?
- What is an api?
- What is J2ee?
- Types of api's
- JAVA EE 3-tier architecture
- JAVA EE 2-tier architecture.

## Drivers

- Introduction.
- What is a JAR file?
- About driver class
- How to load the driver class into the program
- Types of Driver

## JDBC

- Introduction
- Steps to work with JDBC
- JDBC pre-requirements
- Installing MYSQL,DB server
- FIRST JDBC program

## Db url

- What is url?
- Structure of db url

## Connection interface

- Driver Manager class
- About the get connection method
- Connection object

## JDBC objects and methods

- Introduction
- Dynamic and static sql queries
- Statement and prepared statement objects
- ExecuteQuery() and executeUpdate() methods



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## Servlet Hierarchy

- Generic servlet
- HTTP Servlet
- Difference between Generic servlet and HTTP Servlet
- Servlet life cycle
- Single thread model servlets
- Servlet context and servlet config
- Redirect, Forward and Include

## Cookies

- Introduction
- Steps to create a cookie in the servlet
- Types of cookies
- Life cycle of cookies
- Application of cookies

## JSP

- Introduction
- How to create JSP
- Difference between Servlet and JSP

## Attributes

- What is an attribute?
- Need of attributes
- Types of attributes

## Session

- Introduction
- Steps to create a session in the webapp
- Types of session
- Life cycle of session
- Application of session

## JSP Scripting Elements

- Scriptlet tag
- Expression tag
- Declaration tag



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## JSP implicit objects

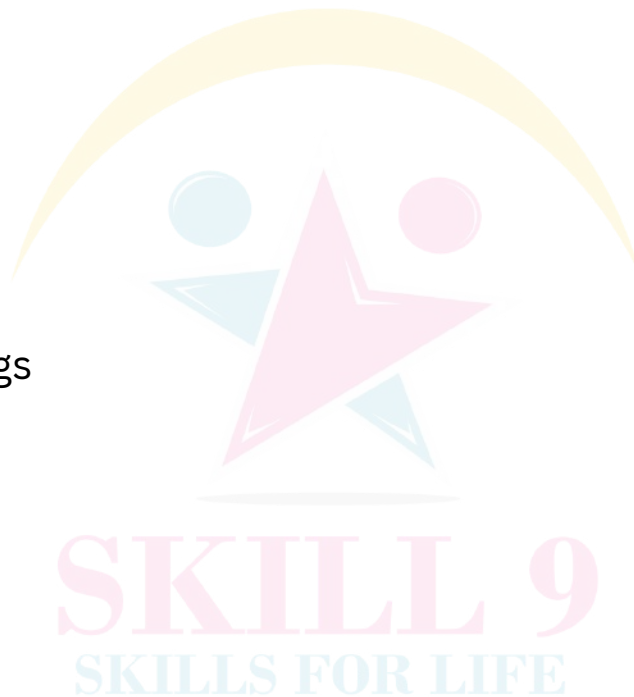
- Request object
- Response object
- Config object
- Application object
- Session object

## Exception handling in JSP

- About isErrorPage and errorPage

## Jstl

- Introduction
- JSTL core tags
- JSTL function tags



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# Frameworks



## Hibernate

- Understand ORM and basics of Hibernate
- Understand and implement life cycle of Hibernate Persistence and Session Factory
- Implement Hibernate Mappings, Inheritance and Types
- Understand Hibernate Criteria and Query Language
- Exploring Hibernate Transactions, Filter and Performance
- Implement Hibernate Search and Validations
- Hibernate with NoSQL and Spring

## Spring

- Introduction
- why spring
- Spring modulus
- Spring application
- Spring in eclipse

## Hibernate

- MVC introduction
- multiple controllers
- model interface
- request Param annotation
- form tag library, text field
- form radio field, checkbox
- form drop-down list
- JDBC Template Example
- PreparedStatement
- ResultSetExtractor
- MVC CRUD Example
- spring MVC Validation

## Spring IOC

- IOC container
- dependency injection
- constructor injection
- injection dependent object
- injection with collection
- constructor injection with map
- injection in inheritance been
- setter injection
- setter injection dependent object
- setter injection with collection
- setter injection with map
- injection versus setter injection
- factory method



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## Introduction

- What Is Database?
- What is Database Management System (DBMS)?
- What is Relational Model ?
- Introduction to RDBMS .
- Brief on E.F CODD .

## Datatypes and Constraints

- What are Datatypes ?
- Types and Examples .
- How to use .
- What are Constraints?
- Types and Examples.
- How to use.

## Statements in SQL

- Data Definition Language (DDL)
- Data Manipulation Language (DML)
- Transaction Control Language (TCL)
- Data Control Language (DCL)
- Data Query Language (DQL)

## Software installation

- Installing and set up of software
- Working on Oracle 10g.

## Operators

- Types and Examples

## Data Query Language (DQL)

- Select
- From
- Having
- Where
- Group By
- Order By

## Functions in SQL

- Single Row Functions
- Multi Row Functions
  - Max ()
  - Min ()
  - Count ()
  - Sum ()
  - Avg ()



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## Sub Query

- Introduction to Sub Query
- Working of Sub Query
- Query Writing and Execution
- Types of Sub Query
  - Single Row Sub Query
  - Multi Row Sub Query
- Nested Sub Query.

## Pseudo Columns

- Introduction on Pseudo Columns
- ROWID
- ROWNUM
- Working and Usage

## JOINS

- What Is Join?
- Types of Joins.
- Cartesian Join
- Inner Join
- Outer Join
- Self-Join
- Queries and Examples.

## Co- Related Sub Query

- Working and Examples

## Data Definition Language (DDL)

- Create
- Rename
- Alter
- Truncate
- Drop

## Data Manipulation Language (DML)

- Insert
- Update
- Delete



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## Transaction Control Language (TCL)

- Commit
- Save point
- Rollback

## Data Control Language (DCL)

- Grant
- Revoke

## Normalization

- Introduction to Normalization
- Types of Normal Forms
- Examples.

## E R Diagrams

- Introduction to ERD
- Examples.

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